

CLAIMS:

1. A method for permitting a module which is configured to perform a dedicated function on a bed and which is coupled to a communication network on the bed to use a graphical interface having an input device, a control circuit coupled to the communication network and to the input device, a memory coupled to the control circuit, and a display coupled to the control circuit, the method comprising the steps of:
- storing predetermined graphic format data in the memory of the control circuit;
- determining whether a particular graphic format data used by the module is stored in the memory;
- downloading and storing the particular graphic format data for the module in the memory if the particular graphic format data was not previously stored in the memory; and
- using the stored particular graphic format data to drive the display based on information transmitted from the module over the communication network.
2. The method of claim 1, wherein the downloading step occurs, if necessary, automatically when the module is added to the network.
3. The method of claim 1, wherein the communication network is a peer-to-peer communication network having a plurality of connection points, and wherein a plurality of modules are electrically coupled to selected connection points of the peer-to-peer communication network, each module being configured to perform a dedicated function during operation of the bed, and each module being configured to communicate over the peer-to-peer communication network with selected other modules and the graphical interface.
4. The method of claim 1, wherein the communication network has a plurality of connection points, and further comprising coupling a new module to a selected connection point of the communication network, detecting the addition of the new module to the communication network, and downloading a particular graphic format data for the new module into the memory if the particular graphic format data is not stored in the memory to control operation of the new module.

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5. The method of claim 1, further comprising displaying an icon representing the module on the display of the graphical interface automatically after the module is coupled to the communication network.

6. The method of claim 1, wherein the module is a communication module, the communication module being coupled to a data link to transmit signals to a remote location.

7. The method of claim 1, further comprising receiving signals from a remote location over the communication network and transmitting the signals to the module attached to the communication network to perform the dedicated function based on instructions received from the remote location.

8. The method of claim 1, wherein the module is a diagnostic module configured to test operation of another module coupled to the communication network.

9. The method of claim 1, wherein the module includes an input
15 coupled to a sensor, the sensor providing an input signal to the module indicative of a
parameter of the bed.

10. The method of claim 1, wherein the module includes an output coupled to an actuator which is coupled to the bed, the module controlling the actuator to perform the dedicated function.

20 11. The method of claim 1, wherein the module is a position sensing module configured to detect various positions of a deck of the bed and to transmit a signal indicative of the position of the deck over the communication network.

12. The method of claim 1, wherein the bed includes an inflatable
25 mattress and an air handling unit coupled to the inflatable mattress, and wherein the
module is an air supply module, the method further comprising receiving signals from
the communication network and supplying control signals to the air handling unit to
selectively inflate and deflate the mattress.

13. The method of claim 1, wherein the bed includes a weigh frame
30 to measure a weight of a body on the bed and to generate an output signal indicative
of the weight, and wherein the module is a scale module, the method further
comprising the steps of receiving the signal indicative of the weight of the body, and

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providing an output signal indicative of the weight of the body to the communication network.

14. The method of claim 1, wherein the module is a patient status module, the patient status module being coupled to at least one patient monitoring device, the patient status module storing patient status information and transmitting the patient status information over the communication network.

15. The method of claim 1, wherein the module is a gateway module, the gateway module being coupled to an application specific module to provide an interface between the application specific module and the communication network.

16. The method of claim 1, wherein the module is a charting module having an interface configured to be coupled to the input device for inputting patient information into the charting module, the charting module storing the patient information and transmitting the patient information to the communication network.

17. The method of claim 1, wherein the input device is a bar code scanner.

19. The method of claim 1, further comprising providing a menu-driven control for the module on the display and selecting from the menu-driven control using the input device.

20. The method of claim 1, wherein the graphic format data comprises at least one of a charting format, a bar graph, an X-Y graph, a pie charts, an icon, and a picture representing the module.

21. A method for monitoring a plurality of modules configured to perform dedicated functions on a hospital bed, the modules being coupled to an electrical communication network on the bed, each module having a controller for communicating over the network, the method comprising the steps of:

assigning a unique serial number to the controller of each of the modules;

recording each unique serial number and an associated module type;

retrieving all the unique serial numbers for the controllers of modules coupled to the communication network of a bed; and

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determining the type of modules on the bed using the retrieved unique serial numbers and the recorded information.

22. The method of claim 21, wherein one of the plurality of modules is a communication module coupled to the network for transmitting the unique serial numbers to a remote location through a data link.

23. The method of claim 22, wherein the communication module permits an operator from the remote location to inventory the modules coupled to the communication network of the bed.

24. The method of claim 21, wherein the plurality of modules comprise at least one of a communication module coupled to a data link to transmit signals to a remote location, a diagnostic module configured to test operation of another module coupled to the communication network, a position sensing module configured to detect various positions of a deck of the bed and to transmit a signal indicative of the position of the deck over the communication network, an air supply module, a scale module, a patient status module, a gateway module, and a charting module.

25. The method of claim 21, wherein a graphical interface is coupled to the communication network, the graphical interface having an input device, a control circuit coupled to the communication network and to the input device, a memory coupled to the control circuit, and a display coupled to the control circuit, the method further comprising the steps of:

storing predetermined graphic format data in the memory of the control circuit;

determining whether a particular graphic format data used by a selected module is stored in the memory;

downloading the particular graphic format data for the selected module into the memory if the particular graphic format data is not stored in the memory; and

using the stored particular graphic data format to drive the display based on information transmitted from the selected module over the communication network.

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26. ~~The method of claim 21, wherein the communication network is a peer-to-peer communication network having a plurality of connection points, and wherein the plurality of modules are electrically coupled to selected connection points of the peer-to-peer communication network, each module being configured to perform a dedicated function during operation of the bed, and each module being configured to communicate over the peer-to-peer communication network with selected other modules.~~

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27. A bed comprising
a frame,
a deck supported by the frame,
a siderail coupled to one of the frame and the deck, the siderail including a side wall having a surface and a recess formed in the surface, and
a display screen, the display screen being coupled to the siderail and movable between a first position in which the display screen is positioned to lie in the recess and a second position in which at least a majority of the display screen is positioned to lie outside the recess.

28. The bed of claim 27, wherein the display screen pivots about a pivot axis relative to the siderail as the display screen moves between the first and second positions.

29. The bed of claim 28, wherein the pivot axis is horizontal.

30. The bed of claim 28, wherein the pivot axis extends through the recess such that a portion of the siderail overhangs the pivot axis.

31. The bed of claim 27, wherein the display screen extends substantially vertically when in the first position and the display screen extends substantially horizontally when in the second position, the display screen facing upwardly when the display screen is in the second position.

32. The bed of claim 27, wherein the display screen is part of a pad that includes a first end and a second end, a portion of the siderail overhangs the first end when the pad is in the first position and when the pad is in the second position

33. The bed of claim 27, wherein surface of the sidewall faces away from the deck.

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